

A¹
cont.
and includes a partial thickness fatigue crack extending a distance t_1 from a surface of said localized region, and wherein said method comprises:

determining said first and second components σ_M , σ_B of said structural stress σ_s in said localized region by performing respective operations having results substantially equivalent to respective results of four equations, where a first equation of said four equations defines a sub-component σ_m' of the structural stress σ_s , a second equation of said four equations defines a force equilibrium condition, a third equation of said four equations defines a moment equilibrium condition, and a fourth equation of said four equations defines a stress continuity condition.

A²
13. (Amended) A method of analyzing structural stress as claimed in claim 5 wherein said selected cross section of said structure is characterized by a thickness t and defines a non-monotonic through thickness stress distribution characterized by a minimum axial stress along a secondary axis lying in said localized region a distance t_2 below a surface of said structure, and wherein said method comprises:

determining said first and second components σ_M , σ_B of said structural stress σ_s in said localized region by performing an operations having results substantially equivalent to a result of solving simultaneously first and second equations with two unknowns, σ_M and σ_B .

REMARKS

Claims 8 and 13 have been amended to correct their dependency.